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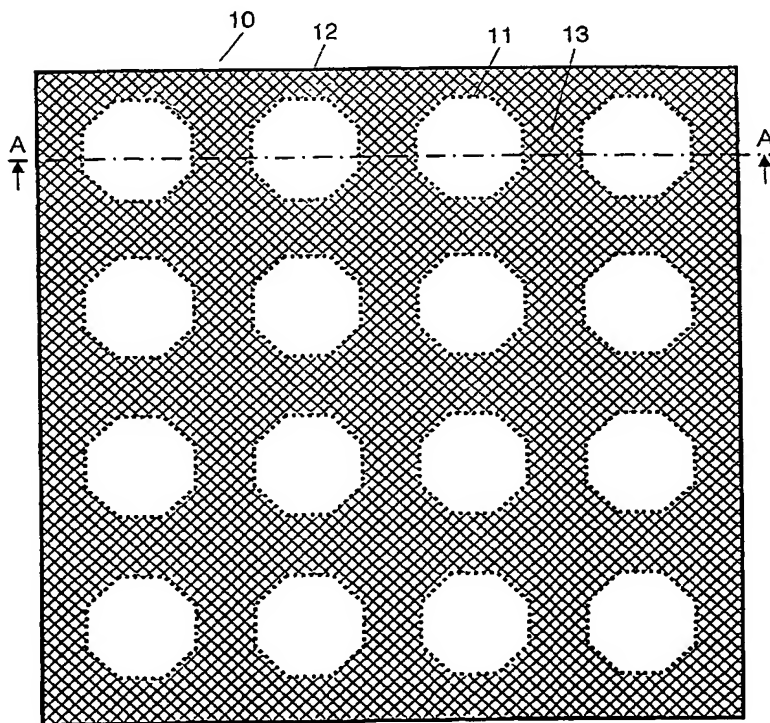
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(54) Title: **VACUUM HEAT INSULATOR AND ITS MANUFACTURING METHOD**



(57) Abstract: A vacuum heat insulator small in limitation in shape of applicable objects, and wide in application is presented. A vacuum heat insulator (10) is formed of a plurality of core members (11) of thickness of 5 mm or less made of glass fiber shaped nearly in a regular octagonal shape, being coated with a gas barrier enveloping member (12) and evacuated in side. The core members (11) are shaped in octagon, and disposed in lattice layout at specified intervals so as to form folding lines in four directions of vertical, lateral and oblique 45-degree directions, parallel to each side. In order that the plurality of core members (11) may be located in independent spaces individually, the entire surface of the enveloping member around the core members (11) is formed as heat seal parts (13), and it is foldable in four directions and is flexible. By cutting the heat seal parts along the core members (11) so as to leave about 3 mm in the periphery, a vacuum heat insulator of any desired shape and wide effective heat insulating

area can be obtained. The core members (11) may be formed in desired shape, and complicated shapes and through-holes can be formed, so that vacuum heat insulators applicable in a very wide scope of purposes can be presented.



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European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 322 743 B1 (STROOBANTS JAN MAURICE) 27 November 2001 (2001-11-27)	1,2,11, 12-14, 18,20-22
X	column 2, line 15 - column 2, line 37 & PATENT ABSTRACTS OF JAPAN vol. 1995, no. 05, 30 June 1995 (1995-06-30) & JP 7 042893 A (MATSUSHITA ELECTRIC IND CO LTD), 10 February 1995 (1995-02-10) abstract	1,2, 11-14, 18-21
A	----- WO 00/75557 A (BRUCKER MICHEL M ; CLINGERMAN GEORGE P (US); SUH KYUNG W (US); DOW CHE) 14 December 2000 (2000-12-14) the whole document ----- -/--	3

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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